



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/805,679	03/13/2001	Paul E. Jacobs	000283	3660
23696 7590 09/06/2007 QUALCOMM INCORPORATED 5775 MOREHOUSE DR. SAN DIEGO, CA 92121			EXAMINER SHAN, APRIL YING	
			ART UNIT 2135	PAPER NUMBER
			NOTIFICATION DATE 09/06/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

us-docketing@qualcomm.com
kaskanla@qualcomm.com
nanm@qualcomm.com

Office Action Summary

Application No.

09/805,679

Applicant(s)

JACOBS, PAUL E.

Examiner

April Y. Shan

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2007 and 02 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 11-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 15-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2135

DETAILED ACTION

1. Claims 1-10 and 15-16 have been examined.
2. A Request for Continued Examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8 February 2007 has been entered.

Election/Restrictions

3. Applicant's election Group I (Claims 1-10 and 15-16) with traverse, in the reply filed on 2 July 2007 is acknowledged. However, because the Applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (M.P.E.P. § 818.03(a)).

The Applicant further stated that Group II (Claims 11-14) is hereby withdrawn.

Response to Amendment/Argument

4. Applicant's amendments and argument have been fully considered, but are moot in view of new ground rejection as set forth below. It is noted that Applicant's arguments are directed towards limitations newly added via amendments.
 5. Applicant argues, "The additional information is distinguished from the extracted information" on page 7 of the Remark, the examiner respectfully disagrees.
- Please see below 35 USC § 112 rejections. Additionally, the examiner phoned the Applicant's Representative, Mr. Donald Kordich on April 23, 2007 for clarification on the

Art Unit: 2135

above remark. Mr. Donald Kordich indicated on the phone he would respond to the examiner's question in a timely manner. However, the examiner did not get any response.

Claim Objections

6. Claim 2 is objected to because of the following informalities:

On line 2 of claim 2, "a third user" should be "a third user input";

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 1-5, 7, 8, 10 and 15-16 are rejected under 35 U.S.C. 112; first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As per claims 1, 2, 8 and 10, they recite "...receive a **first** input from the user and (ii) activate the processor to selectively initiate extraction of the hidden data in accordance with the first user input to provide extracted information represented by the hidden information, (iii) receive a **second** user input indicative of user preferred portions of **additional information related to the extracted information** represented by the

Art Unit: 2135

hidden data, and (iv) activate the processor to provide the user preferred portions of the additional information in response to the second user input, wherein the processor provides the extracted information represented by the hidden data in response to the first user input, and provides the user preferred portions of the additional information in response to the second user input... (i) receive a third user input...". It appears to the examiner there are **three different** user inputs being recited in the claims. The examiner carefully and respectfully reviewed the original disclosure, for example, in par. [0105], lines 24-26, the Applicant discloses "receive a first input from the user...in accordance with the first user input". Where is the second user input in the original disclosure at the time of the filing? Additionally, in par. [0103], lines 29-30, the Applicant discloses "purchase an advertised product **or** may desire more information about the song...". On page 7 of the Applicant's remark, the Applicant stated "Support for these amendment may be found, for example, in the present specification in paragraph [1036]. However, par. [1036] again discloses "...a user interface 42 for permitting a user to either activate an information mode **or** enter choices regarding displayed information...". Though "additional information" is in the par. [1036], it does not disclose requesting "additional information" as a second user input and receive a third user [input] to establish a communication link. Instead, there is one user input discloses in the original disclosure.

In par. [0129] of the Applicant's original disclosure, the Applicant discloses in lines 14-28, "...The audio signal 11 may be an electronic representation of a particular song...a watermark 12 is created for **embedding additional information in the audio**

signal 11. The watermark 12 may include, by way of example, identification (ID) information representing the name of the song, the performing artist, the name of a retail outlet where the song can be purchased, or the copyright owner's information etc...such as a phone number or URL...". And in paragraphs [1040] – [1041] of the Applicant's original disclosure, the Applicant discloses, "...When the user desires additional information regarding a song, advertised product, or other information heard over the speaker 31, the user operates the user interface 42, as shown in block 402 of Fig. 7...When the interface 42 is operated, the processor 44 receives the electrical signal from the microphone 41 and extracts the ID and linking information... Thus, watermark 12, containing ID information in the form of the name of the performing artist, and the name of the song, and linking information in the form of a web site, are presented as the output 44a in an exemplary format 12'...is then presented to the user on the display 46 as indicated in block 406 of fig. 7...". It appears to the examiner that the additional information is part of the extracted information and they are not distinguished from each other.

Although in par. [0103] of the Applicant's original disclosure, it discloses "In this particular example, the listener may desire...or may desire more information about the song, or the performing artist, such as where the artist will be performing in concert", The examiner finds no support in the original disclosure about "a second user input indicative of user preferred portions of **additional information related to the extracted information**" as recited in the claims. In another words, "The additional information is

Art Unit: 2135

distinguished from the "extracted information" is not supported in the par. [0103] and [0136] as the Applicant states on page 7 of the Remark.

As per **claim 5**, "carried with the portable device" is being recited. However, this claim limitation is not disclosed in the original disclosure.

As per **claim 7 and 16** and also on the page 8 of the remark, the Applicant discloses "the extracted hidden data including identifier information for the portable communication". However, in the original disclosure, the Applicant only discloses in par. [1044], "...The base station 50 receives the user response signal 92 and extracts the serial number information from the signal 92". Serial number information is different from the identification information for the portable communication. Therefore, "the extracted hidden data including identifier information for the portable communication" is not supported in the par. [1044] of the original disclosure.

"[T]he test for sufficiency of support...is whether the disclosure of the application relied upon 'reasonably conveys to the artisan that the inventor had possession at the time of the later claimed subject matter.'" *Ralston Purina Co. v. Far-Mar-Co., Inc.*, 772 F.2d 1570, 1575, 227 USPQ 177, 179 (Fed. Cir. 1985) (quoting *In re Kaslow*, 707 F.2d 1366, 1375, 217 USPQ 1089, 1096 (Fed. Cir. 1983)). "Application sufficiency under § 112, first paragraph, must be judged **as of the filing date [of the application]**." *Vas-Cath*, 935 F.2d at 1566, 19 USPQ2d at 1119 (citing *United States Steel Corp. v. Phillips Petroleum Co.*, 865 F.2d 1247, 1251, 9 USPQ2d 1461, 1464 (Fed. Cir. 1989)).

Any claim not specifically addressed, above, is being rejected as incorporating the deficiencies of a claim upon which it depends.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-5, 10 and 15-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per **claims 1 and 10**, the phrase "and/or" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase is either optional or mandatory. Also, in **claim 1**, "a user interface... (ii)... the hidden information" is being recited. However, the hidden information lacks of antecedent basis. Is it the Applicant's intent that hidden data and hidden information are the same or different?

Art Unit: 2135

Any claim not specifically addressed, above, is being rejected as incorporating the deficiencies of a claim upon which it depends.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. Claims 1-4 and 10 rejected under 35 U.S.C. 102(e) as being anticipated by August et al. (U.S. Patent No. 6,125,172).

As per **claims 1 and 10**, August et al. discloses a portable communication device/method ("wireless capture device 110" in fig. 1 and e.g. col. 4, lines 11-25.

Please note wireless capture device corresponds to Applicant's a portable communication device) comprising:

a microphone ("microphone 14" in fig. 1 and e.g. col. 4, lines 11-12) structured for receiving sound waves ("...and microphone for receiving an audio signal having encoded data that is non-discernable by a listener..." – e.g. abstract), the sound waves being representative of (i) an audio signal ("...continuously receives the audio signal, for instance using microphone 14..." – e.g. col. 3, ll. 17-18) and (ii) hidden data embedded in the audio signal ("... The data may include information for initiating a transaction or

originating a telephone call, as well as additional information (e.g. price and ordering information)...” – e.g. col. 6, lines 54-67), the microphone converting the received sound waves into an electrical output signal (“The microphone converts the sound waves into an electrical signal” – e.g. abstract and col. 4, lines 11-16);

a processor (“microprocessor 220” in fig. 6) electrically coupled to the microphone and configured to receive the electrical output signal in order to extract the hidden data and provide information represented by the hidden data (“A processor receives the electrical signal and retrieves transaction data that is part of the encoded data... Once the transaction data is retrieved, a telephone call can be originated and at least a portion of the transaction data can be transferred to a desired destination for initiating a transaction” – e.g. abstract. Please note transaction data corresponds Applicant’s extract the hidden data);

a user interface (“button interface 240” in fig. 6) electrically coupled to the processor and configured to (i) receive a first input from the user and (ii) activate the processor to selectively initiate extraction of the hidden data in accordance with the first user input to provide extracted information represented by the hidden information (e.g. “...an apparatus initiates a transaction... and microphone for receiving an audio signal... The microphone converts the sound waves into an electrical signal... Once the **transaction data** is retrieved... for initiating a transaction” – e.g. abstract) (iii) receive a second user input indicative of user preferred portions of additional information related to the extracted information represented by the hidden data, and (iv) activate the processor to provide the user preferred portions of the additional information in

Art Unit: 2135

response to the second user input ("The data may include information for initiating a **transaction**... as well as **addition information** (e.g., price and ordering information associated with the television program..." – e.g. col. 6, lines 54-58, "...using the DIAL function. This function is initiated by activation of button 242. With this function, dialing information, which is part of the data captured by capture device 110 and now stored in memory, is retrieved.." – e.g. col. 10, ll. 30-35 and "When a user of capture device 110 desires to use any of the data stored in memory 221,... by initiating the RECALL function upon activating button 226... Through this function, the user will be able to selectively peruse or scroll through the stored data, so as to retain or use selected portions thereof" – e.g. col. 9, lines 43-59. Please note transaction data and additional information are distinguished from each other) , wherein the processor provides the extracted information represented by the hidden data in response to the first user input (e.g. "...an apparatus initiates a transaction... and microphone for receiving an audio signal... The microphone converts the sound waves into an electrical signal... Once the transaction data is retrieved... for initiating a transaction" – e.g. abstract), and provides the user preferred portions of the additional information in response to the second user input (e.g. col. 6, lines 54-58, col. 9, lines 43-59 and col. 10, ll. 30-35); and

a user presentation mechanism ("Display 225" in fig. 6) configured to present the information represented by the hidden data to the user ("...while a display, such as an LCD screen, can display at least a portion of the transaction data to a user. The

transaction data can include dialing information... can also include descriptive information..." – e.g. col. 3, lines 20-32).

As per **claim 2**, August discloses the portable communication device according to claim 1, wherein the user interface is further configured to (i) receive a third user input to establish a communication link, and (ii) activate the processor to output data to establish the communication link, wherein the output data comprises link information included in the extracted information represented by the hidden data (e.g. col. 6, line 63 – col. 7, line 25).

As per **claim 3**, August discloses "the portable communication device according to claim 1, further comprising an output mechanism electrically coupled to the processor and configured to receive the output therefrom and transmitting a signal corresponding to the received output" (e.g. col. 9, ll. 60-67).

As per **claim 4**, August discloses the portable communication device according to claim 3, wherein the transmitted signal activates computer network functions (e.g. col. 6, line 63 – col. 7, line 25, col. 12, lines 34-50).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2135

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 5, 7, 8 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over August (U.S. Patent No. 6,125,172) in view of Goodman (U.S. Patent No. 4,916,691).

As per **claims 5 and 15-16**, August discloses comprising an embedding device, carried with the portable device, for (i) receiving the output from the processor, and (ii) embedding the output from the processor with identification information, wherein the signal corresponding to the received output includes the embedded identification information (e.g. col. 1, line 57 – col. 2, line 1, col. 10, lines 31-43, col. 10, line 65- col. 8, line 22 and fig. 8).

August does not expressly disclose identification associated with the portable communication device.

Goodman met this claim limitation of this serial number is for the portable communication device by disclosing in col. 9, lines 28-30, "the base station extracts the terminal identifier from the information field of the dial tone message...".

It would have been obvious to a person with ordinary skill in the art to substitute August's serial number/other identification information with Goodman's serial number of the terminal to achieve the predictable result of embedding output.

As per **claims 7 and 8**, please see the above rationale in rejecting claim 1. August further met the claimed limitation by disclosing in the abstract, "a processor receives the electrical signal and retrieves transaction data..." and in col. 4, lines 11-25,

"...through either a data transfer to a **separate processor** or a data processing in a processor 14a contained...for example, the wireless capture device and receive...and then transfer it to a **portable base station** 109 as shown in Fig. 5 and in claim 15 of the August, "...a **personal base station** in which **said processor...are contained**".

Although in Fig. 7, August discloses that extracted hidden data including a serial number and in col. 1, lines 57-60, August discloses "The encoded non-perceptible data can include associated dialing...or other identification information, so that other portions of the captured data can be transmitted to an appropriate final destination or device" August does not expressly discloses this serial number is for the portable communication device.

Goodman met this claim limitation of this serial number is for the portable communication device by disclosing in col. 9, lines 28-30, "the base station extracts the terminal identifier from the information field of the dial tone message...".

It would have been obvious to a person with ordinary skill in the art to substitute August's serial number/other identification information with Goodman's serial number of the terminal to achieve the predictable result of using a base station to extract hidden data.

14. Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over August (U.S. Patent No. 6,125,172) in view of Henderson (U.S. Patent No. 6,427,064)

As per **claims 6 and 9**, August discloses a portable communication device comprising:

a receiver ("an acoustic data receiver has microphone for receiving an audio signal..." – e.g. col. 2, lines 53-57) structured for receiving sound waves ("...and microphone for receiving an audio signal having encoded data that is non-discernable by a listener..." – e.g. abstract), the sound waves being representative of (i) an audio signal ("...continuously receives the audio signal, for instance using microphone 14..." – e.g. col. 3, ll. 17-18) and (ii) hidden data embedded in the audio signal ("...The data may include information for initiating a transaction or originating a telephone call, as well as additional information (e.g. price and ordering information)..." – e.g. col. 6, lines 54-67), the microphone converting the received sound waves into an electrical output signal ("The microphone converts the sound waves into an electrical signal" – e.g. abstract and col. 4, lines 11-16);

a processor ("microprocessor 220" in fig. 6) electrically coupled to the microphone and configured to receive the electrical output signal in order to extract the hidden data and provide information represented by the hidden data ("A processor receives the electrical signal and retrieves transaction data that is part of the encoded data...Once the transaction data is retrieved, a telephone call can be originated and at least a portion of the transaction data can be transferred to a desired destination for initiating a transaction" – e.g. abstract. Please note transaction data corresponds Applicant's extract the hidden data);

a user interface ("button interface 240" in fig. 6) electrically coupled to the processor and configured to (i) receive a first input from the user and (ii) activate the processor to selectively initiate extraction of the hidden data in accordance with the first

Art Unit: 2135

user input to provide extracted information represented by the hidden information (e.g.

"...an apparatus initiates a transaction... and microphone for receiving an audio signal... The microphone converts the sound waves into an electrical signal... Once the

transaction data is retrieved... for initiating a transaction" – e.g. abstract) (iii) receive a

second user input indicative of user preferred portions of additional information related to the extracted information represented by the hidden data, and (iv) activate the

processor to provide the user preferred portions of the additional information in

response to the second user input ("The data may include information for initiating a

transaction... as well as **addition information** (e.g., price and ordering information

associated with the television program..." – e.g. col. 6, lines 54-58, "...using the DIAL

function. This function is initiated by activation of button 242. With this function, dialing

information, which is part of the data captured by capture device 110 and now stored in

memory, is retrieved..' – e.g. col. 10, ll. 30-35 and "When a user of capture device 110

desires to use any of the data stored in memory 221,... by initiating the RECALL function

upon activating button 226... Through this function, the user will be able to selectively

peruse or scroll through the stored data, so as to retain or use selected portions thereof"

– e.g. col. 9, lines 43-59. Please note transaction data and additional information are

distinguished from each other) , wherein the processor provides the extracted

information represented by the hidden data in response to the first user input (e.g. "...an

apparatus initiates a transaction... and microphone for receiving an audio signal... The

microphone converts the sound waves into an electrical signal... Once the transaction

data is retrieved... for initiating a transaction" – e.g. abstract), and provides the user

preferred portions of the additional information in response to the second user input (e.g. col. 6, lines 54-58, col. 9, lines 43-59 and col. 10, ll. 30-35); and

a user presentation mechanism ("Display 225" in fig. 6) configured to present the extracted information represented by the hidden data ("..while a display, such as an LCD screen, can display at least a portion of the transaction data to a user. The transaction data can include dialing information... can also include descriptive information..." – e.g. col. 3, lines 20-32).

August discloses in col. 4, lines 4-5, "a source of an audio signal, indicated generally at 10a" and in col. 4, lines 6-11, August discloses, "...It can be a radio 11 or the audio channel of a television...". It is common knowledge in the art at the time of the invention that a radio frequency signal is similar to those used by television and FM radio stations.

August does not expressly disclose a broadcast signal is a radio frequency signal.

Henderson discloses in col. 11, lines 1-22, a broadcast signal is a radio frequency signal.

At the time of the invention it would have been obvious to a person with ordinary skill in the art to incorporate Henderson's a broadcast radio frequency signal into August's system since it is common knowledge in the art at the time of the invention that a radio frequency signal is similar to those used by television and FM radio stations and radio frequency communication is conventional.

Art Unit: 2135

Conclusion

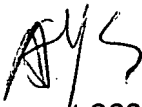
15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (See PTO – 892)

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to April Y. Shan whose telephone number is (571) 270-1014. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


21 August 2007
AYS


KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 21